

ABSTRACT OF THE DISCLOSURE

Disclosed is a cylindrical grinding machine of the type that a workpiece support device composed of a work head and a foot stock is mounted on a forward upper portion of a bed while a wheel head unit composed of a slide base and a wheel head is mounted on a rear upper portion of the bed. A coolant collecting vent which takes a rectangular shape as viewed from above vertically extends in the bed and opens to the upper surface of the bed to cover an area that extends from under the workpiece on the workpiece support device to under the forward portion of the wheel head unit. A horizontal vent is provided in the bed to open to the rear surface of the bed and to communicate with the collecting vent. A coolant supply device is inserted at a part thereof into the horizontal vent from the rear surface of the bed to extend an inlet opening into the collecting vent. In one embodiment, the slide base is mounted to straddle over the collecting vent and is guided at both ends thereof on the bed to be movable back and forth, and the wheel head is guided to be movable on the slide base in a right-left direction. In another embodiment, the part of the coolant supply device inserted into the horizontal vent is constituted as a discharge duct, from which a mist discharge duct branches upwardly to be connected to a mist collecting device. Airflow blocking means is provided for permitting the coolant to flow through but for blocking airflow from an outlet port of the discharge duct toward the mist discharge duct.